

ABSTRACT OF THE DISCLOSURE

Provided are a thin film bulk acoustic resonator consisting of a single chip for minimizing phase noise by controlling resonance frequency and a voltage controlled oscillator using the same. The thin film bulk acoustic resonator comprises: a fixed body having a first electrode; a driving body having a second electrode installed to be adjacent to the fixed body and moved toward the fixed body due to voltage applied to the first and second electrodes; and a thin film bulk acoustic resonator for controlling the resonance frequency according to change of stress generated due to the movement of the driving body.